

April 3, 1989

TO: File

FROM: Holland Shepherd, Reclamation Soils Specialist HWS

RE: Field Visit, Snow Mine, M/015/013, Probe Mine, M/015/011, Four Corners, M/015/014, Atlas Minerals, Emery County, Utah

I visited the Atlas Minerals sites, listed above, on March 28, 1989. The purpose of the visit was to evaluate the partial reclamation of all three sites. I met with Mr. Carl Dixon of Atlas Minerals and Mr. Joe E. Beirschied of B & W Construction Company. Atlas had contracted with Mr. Beirschied this past winter to reclaim portions of the sites.

Atlas intends to reclaim the sites down to the 5 acre cut-off then transfer the sites to Mr. Beirschied, who will then file an SMO on each site. Currently, these sites have been regraded and contoured (predominantly waste dumps); seeding and mulching is to take place this fall. Portions of the sites have not been reclaimed, like shafts, vent holes and warehouses. A discussion of each site follows:

Snow Mine

All earth work and grading has been completed at this site, other than 3-4 acres which will remain disturbed indefinitely, pending future uranium marketability. Earth work is complete on the mine water ponds consisting of approximately 3 acres. The area has been graded flat using native soil material. The soil quality should enhance revegetation prospects. The sites waste dumps have all been rounded and graded to 2.5-3:1 slopes. The waste mounds have been blended to match the surrounding terrain. The waste material on these dumps composed of shale and limestone will be difficult to revegetate. The dumps compose approximately 10 acres of disturbance.

The remaining structures on site consist of three sheds or warehouses, a head frame and two large water storage tanks. The site access road remains as well.

The original permit calls for 22 acres of disturbance and is covered by a \$83,236 Board Contract. The actual disturbance is much less, equaling 13-15 acres. After reclamation is completed on the dumps, the remaining acreage will equal approximately 3-4 acres including the access road.

Mr. Beirschied plans to assume the permit after complete release of the 10 acres of dumps and ponds. Another option would have Mr. Beirschied assuming the permit under a reduced bond. The bond would include revegetation costs and all cost associated with that portion of the site to remain unreclaimed. The bond has not yet been calculated. At this point it is assumed to be less than \$10,000.

I recommend that the Division reduce the bond for the areas which have been regraded and contoured; and recalculate the bond based on the remaining disturbed acreage and revegetation costs.

Probe Mine

This site has been reclaimed in much the same way as that described with the Snow. The difference being, the site disturbance is already at the 5 acre and under cut-off point. Mr. Beirschied plans to file an SMO on this site. The regrading of the dumps (seeding and mulching to take place this fall) is a show of good faith on the part of, the future operator, Mr. Beirschied.

The dumps reclaimed on site equal approximately 3 acres. The remaining disturbance equals approximately 2 acres. This included: two warehouses, head frame and shaft, and one large water tank.

Some of the dump slopes have been left at the angle of repose to blend into the surrounding terrain (see photos dated March 28, 1989).

I recommend that once an SMO is filed on this site, the Division release Atlas' Board Contract for \$53,114. The site has been permitted for 11 acres, the actual acreage is 5 acres.

Four Corners Mine

The site has been reclaimed in the same manner as the other two sites. About 2 acres total remain with no reclamation. The acreage includes two warehouses, a vent hole and a shaft. Atlas and Mr. Beirschied have reclaimed approximately 15 acres of waste dumps. Reseeding and mulching is left to be done on these dumps.

The site was originally permitted for 34 acres. The actual area is closer to 14-15 acres. The site carries a Board Contract for \$137,775.

I informed Mr. Beirschied that the bond could be reduced; however, the revegetation bond would remain, until completed, along with any cost associated with the reclamation of the facilities and the shaft.

I recommend that the Division reduce the bond, at this time, taking into account the grading and blending of the dumps already completed and the reclamation work still to be completed.

Summary

Atlas will be sending me aerial photos of these sites to be used to determine accurate acreage estimates. The estimates will be used in re-evaluating the bonds for the Snow and the Four Corners sites. The Probe can be released as soon as an SMO has been filed.

I explained to Mr. Dixon and Mr. Beirschied that the bonding obligation at the Snow and Four Corners can be dropped as soon as it is determined that revegetation is adequate. This would complete reclamation of the dumps allowing the operator to refile under an SMO. The time frame involved will be at least one year. Because of the low precipitation in the area, it may take longer to verify vegetation establishment.

Mr. Beirschied and I discussed seeding and mulching of the three sites. We agreed that seeding would take place the fall of 1989 and that it would include 1,000 lbs/acre of hay mulch to be incorporated onto the dumps. We also agreed to a specific seed mix to be used on the three sites. These species are listed below:

	<u>Common Name</u>	<u>Species</u>	<u>Rate lbs/ac</u>
1.	Galleta grass	Hilaria jamesii	1
2.	Indian ricegrass	Oryzopsis hymenoides	2
3.	Sand dropseed	Sporobolus cryptandrus	1
4.	Grama grass	Bouteloua gracilis	2
5.	Shadscale	Atriplex confertifolia	2
6.	Greenes rabbitbrush	Chrysothamnus Greenei	2
7.	Fourwing saltbrush	Atriplex canescens	2
8.	Yellow sweetclover	Melilotus officinalis	2
		Total	14

The rates are for broadcast seeding. They are double what Mr. Beirschied and I discussed in the field. If the seed mix is drilled, these rates can be cut in half.

jb
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